

ABSTRACT

The invention includes a novel cardioplegia solution in which pyruvate serves as the primary energy source. The solution may be used in any surgery where the heart must be arrested, but it is particularly useful in cardiopulmonary bypass surgery. Because the solution relies primarily upon pyruvate to protect the heart from damage during and immediately after arrest, other additives are not as necessary as with current cardioplegia solutions or are not necessary at all. The invention also includes a method for making the cardioplegia solution and a process of performing cardiopulmonary bypass surgery using the novel cardioplegia solution.